REVIEWS.

Art. VIII.—*The Transactions of the American Medical Association.* Instituted 1847. Vol. VI. Printed for the Association, Philadelphia, 1853. 8vo: pp. 869.

Whatever differences of opinion may be entertained as to the propriety of a change in the organization of the American Medical Association, or in regard to the proper course to be pursued by it with the view to effect a reform in medical education and the establishment of a higher standard of attainments for admission to the doctorate, all must confess that it has, at least, issued a series of printed *Transactions* of a highly creditable character, each successive volume of which has excelled the preceding in the general interest and intrinsic value of its contents. We would not insinuate, however, that the entire labours of the Association have been confined to the publication of six annual volumes of *Transactions*, creditable as these unquestionably are. Even they who look upon it, and upon its acts, with the least favourable eyes, will not, we think, deny that, however unsuccessful it may as yet have been in reforming the medical schools, and closing the door of admission into the ranks of the profession against the illiterate and uninstructed, it has, nevertheless, exercised upon the profession at large, throughout the greater portion of the United States, a decidedly beneficial influence. By the attention it has directed to the present condition of medical instruction in this country, and the requirements for graduation as a doctor in medicine in our several schools, and the inquiry it has excited into the means best adapted to promote the welfare of the profession generally, much good has been already effected. While, by the impulse it has given to the organization of the medical men of our country into county and State societies, and, in this manner, enabling them to realize their community of interests, and the importance of co-operation in the maintenance and promotion of those interests, the Association has brought into action agencies the working of which cannot fail ultimately to elevate the character and standing of our profession, and thus to augment its efficiency. It has, at the same time, through the organizations it has already been chiefly instrumental in effecting, caused the collection and comparison of the observations of a large number of practitioners upon the character, causes, and proper treatment of the diseases incident to the different sections of the United States, and the presentation of these, that would otherwise have been lost to the profession at large, as a valuable contribution to the common stock of medical knowledge.

The constitution of the American Medical Association may be defective—it may not always pursue the wisest course for the attainment of the great objects for which it was instituted; still, no one can in truth deny that it has already worked out much of good for our profession, and we may add that it is our firm belief it is destined to effect still more.

To those who affect to believe that the labours of the Association have resulted in nothing, we would say, in the language of Dr. Wellford, from his address, delivered at the opening of its last annual session:—

"But, gentlemen, if it be nothing to have reduced an amorphous, chaotic, professional mass to something like symmetry and order; nothing, to have awakened attention to important defects in preliminary and medical education, and, in some measure, to have removed them; nothing, to have caused the establishment and reorganization of local and State medical societies; nothing, to have caused the enactment of wholesome laws, both by the Federal and State governments; nothing, to have produced scientific papers of acknowledged ability and erudition; nothing, to have awakened dormant talent, and elicited a vernal bloom which promises a rich harvest of autumnal fruit; nothing, to have acquired a reputation which renders even its membership a title of honour and distinction; is it also nothing, by unaided, intrinsic moral power, to have bound in one code of medical ethics, thousands of men in every section of this wide Union, each one free to act according to his own individual views, but yielding them in cheerful obedience to the opinions of the Association, with as much deference and submission as if it were armed with the power and terrors of penal law? Is it nothing, unendowed with the compulsory authority of legal enactment, or the seductive influence of mileage and per diem allowance, annually to convoke such an assembly as I have now the honour to address? Such a congress, of such materials, and under such circumstances, presents a spectacle of moral beauty, to which the opponents of medical reform cannot be insensible. It must command their respect and admiration, even if it fail to secure their co-operation. I know not, gentlemen, what may be the effect on others of an occasion like this, but for my single self, when I thus recognize the denizen of the city and the forest; him of the frozen north, and of the sunny south; him of the mountains, the rivers, and the prairies of the west, with him from the borders of the broad Atlantic, bringing their various opinions and prejudices, and casting them together as a sacrificial offering on the altar of science and professional patriotism; when I see them animated by the same honourable and lofty impulse, and, in fraternal harmony, uniting their efforts to attain the same grand results, I feel an honest pride in my profession and my country, and an abiding confidence that to such sons the high destinies of both may be safely intrusted."

As journalists, our concern is less with the internal polity and general reformatory measures of the Association, than with the results of its labours, as exhibited in its published *Transactions.* We pass by, therefore, the minutes of its business proceedings, and all discussion as to the policy of the very decided conservative feeling evinced at its last session, in reference to the radical changes in its organization presented for adoption; as well as any inquiry into the probable influence upon its usefulness and permanency of an attempt, in the present unorganized condition of the medical profession throughout a large portion of the United States, to restrict the representation to delegates from State or county societies; and shall proceed at once to consider the several reports and essays embraced in the volume before us.

The reports of the special committees are preceded by the very earnest and eloquent "Address" of the late President of the Association, Dr. Beverley R. Wellford, of Virginia, delivered at the opening of the session of 1853.

The address commences with a brief sketch of the history of the Association from its institution in 1847 to the commencement of the present year, with a few remarks on the leading features of its organization, and then enters upon an examination of what the Association has already effected towards the accomplishment of the leading objects for which it was instituted. Dr. Wellford treats this portion of his subject with great ability. He believes that the Association has accomplished much, but is far from supposing that every necessary reform in our profession has as yet been achieved by it.

"It may," he remarks, "be fairly assumed, that the American Medical Association has thus far succeeded to an extent fully as great as ought to have been anticipated. Nevertheless, it is admitted that much remains to be effected before its power is fully developed, or its objects and its aims are fully attained. Dependent as it of necessity is on the co-operation of the individual members of the profession, it is not possible that the Association can consummate its designs, or attain the zenith of its power and influence until the medical men of every neighbourhood are formed into local societies, and State societies are organized in all the States of the Union. The more uniform the organization, the more effective it will prove in its practical working, and uniformity can only be obtained by some plan of general application recommended by this body. The central orb of medical organization in the United States, it must throw its light on the periphery before the reaction can be felt, and the concentrated influence of the whole profession act as a combined and powerful unit. We have the material—abundant, effective material—but as yet unavailable, and, to a great extent, unappreciated, because it has not yet been illuminated by the light of medical progress. That light must emanate from this Association, and it will be reflected and thrown back upon its parent, from every hill and valley in the land."

In proceeding to a brief review of the labours still to be accomplished by the Association, Dr. Wellford enforces the necessity of that complete and uniform organization of the physicians in every portion of the United States, above alluded to; an organization that shall constitute each and every one of them "an integral part of the great whole," so that the interest of the individual and of the mass shall be identified, and made mutually to sustain and promote each other.

Another object to which reference is made by Dr. Wellford, as one of primary importance for the advancement of medical reform, is a proper regulation of the license to practice—the investiture of the profession with the right to exclude from its honours those, at least, who wear its livery without acknowledging its authority; to draw the line of demarcation between the true doctor of medicine and the pretender and charlatan. The attention of the Association is likewise directed to the necessity of State legislation to restrain the domestic adulteration of drugs and medicines. The address concludes with an appropriate and feeling allusion to the loss the Association has sustained by the death, since its preceding session, of more than one of those who then participated in its councils, and "devoted their influence and their gifted intellects to the advancement of medical reform." Of these are especially named "the calm and philosophic DRAKE, the eminent and learned HORNER."

Melancholy as was the task of communicating these losses to the delegates assembled at the last session of the Association, how much more so will be the task of him upon whom the duty devolves of opening the ensuing session; who will come with the heavy tidings that, since the Association last assembled, by a calamity as unexpected as it was swift and fatal, seven of its members had been swept from existence in the midst of health, and whilst pursuing a career of usefulness as honourable to the profession of which they were cherished members, as it was valuable to the communities amid whom their lot had been cast.

The entire address of Dr. Wellford is deserving of the serious attention of every American physician. Its extensive circulation would be a means, we are convinced, of placing the true character and sphere of operation of the Association more clearly before the profession, and of removing some prejudices and misconceptions in regard to it, which, from whatever cause they may have originated, have been propagated, it is to be feared, from motives that originate less in a love of truth and justice than in selfish and interested feelings.

The first of the reports, as they are arranged in the volume before us, is that of the Committee on Medical Education. The report is drawn up by the chairman of the committee, Dr. Z. Pitcher. It is marked throughout by a manly independence of thought on the important points involved in the general subject of which it treats, and much sound sense in the leading conclusions to which its author has arrived. It may, perhaps, disappoint, on the one hand, such as had formed for themselves an ideal model of a perfect system of medical education, which, without the slightest consideration as to the peculiar characteristics of our national character and institutions, and the state of society throughout a large portion of our widely extended territory, they had hoped to see speedily carried into effect, through the instrumentality of the American Medical Association; and on the other hand, induce those who look upon the present condition of our leading Medical Schools as demanding little if any improvement, to exult in the supposed abandonment by the Association of the high ground assumed by it, in its outset, in respect to medical education. By a careful perusal of the report, however, it will be perceived, we think, to be as positive in maintaining the necessity of arousing "the profession of the country to such an effort as shall shake from itself the reproach of ignorance and of quackery, by which it has been humbled in its own estimation, and abased in that of its fellow-men," as either of its predecessors.

The aim of its author would appear to be, to point to the means by which, in his estimation, reform in medical education may, under the existing state of things in the United States, be most certainly and speedily promoted.

> "Your Committee," he remarks, "have, as they conceive, sufficiently elevated ideas of the mission which the medical colleges now in being are designed to fulfil, and feel an honourable pride in tracing their professional paternity to this source. They also feel that one thing more is wanted as a remedy for the evil just referred to (the prevalence of quackery), and that is the establishment of free colleges for the preparatory and professional education of the young men now scattered over the wide and half-cultivated domain of the West."

To show that such a measure can be carried into effect, notwithstanding the popular character of our political institutions, the report refers to the organization of the University of Michigan, which is the only institution in the country endowed by Government and regulated by State authority. After giving a brief sketch of the course of study pursued, and the regulations and requirements for graduation, established in this institution, the report proceeds as follows:—

> "We are aware that former committees have objected to an increase in the number of medical schools, so situated as not to give to their pupils the benefits of hospital practice; the reasons for which, at first sight, appeared entirely satisfactory, and may do so now to a large majority of the Association. We believe that this subject should be examined from two distinct points of view, one of which exhibits the character and qualification of those who graduate at the best schools, and the other, the character and influence in society of that other multitude, who choose to exclude themselves from all these advantages, but come, nevertheless, by some illegitimate entrance, into the great professional amphitheatre. If there was a necessity for studying this subject only from the first point of view—of looking only to the effects produced upon the pupil by his attendance upon the college lectures and the hospital clinique, and if we could leave out of sight and out of mind the great number of practitioners with which the country would be filled—if the elementary schools of medicine were any less accessible than they now are, there would be no division in sentiment; no dissent from the opinions expressed by preceding committees, touching this matter. If there were in existence laws, which could

be enforced, for restraining irregularities in practice, and if none dared exercise the functions of the physician except he were regularly invested with the baton of office, there would be great propriety in limiting the number of schools, and, at the same time, increasing their demand upon the mental energies of the pupil, as conditions precedent to receiving a degree.

"In the absence of such laws, and for the want of any power to bear upon the profession, other than the power of opinion, the wisest course, in the judgment of your Committee, would be to extend the hand of fellowship to all such schools, as, having a competent faculty, shall give a course of lectures on general, comparative, and descriptive anatomy; physiology, and its application to pathology; on chemistry, with its relations to pharmacy and toxicology; on materia medica and therapeutics; the principles of surgery; obstetrics, including the doctrine of ovology; and on the principles and practice of medicine.

"If such schools could be restricted in conferring degrees to the grade of Bachelor of Medicine, a practical and valuable distinction would be made between those which teach the elements of medical science, and that other class, having their seat in the great commercial cities, and whose propinquity to hospitals enable them, if their advantages are rightly improved, to combine the inculcation of principles with their practical application and elucidation."

This leads the Committee to a consideration of the subject of clinical instruction. Its great importance as a means of preparing the student for the successful practice of his profession is admitted in the outset.

After a few pertinent remarks on the total inefficiency and absurdity of the system of clinical instruction as now generally pursued in the hospitals of the United States, the report holds the following language, in the correctness of which we fully coincide :—

"One object to be accomplished in bringing together the pupil and the patient is to train the perceptive faculties of the student; to educate, in fact, his sense of touch, his eye, and his ear. How much progress is made in this process, except by the resident pupil of a hospital, is very well known by students and teachers.

"Because the end has not yet been attained, we would by no means relinquish the pursuit. We would reconstruct our hospital organizations, and adapt them to the wants of the time. This could be done by erecting them into schools of practice, with a special faculty, whose plan of instruction should have a direct relation to the cases in their wards, so that each one should become an illustration of the text of the professor. Schools thus constituted, and authorized to confer some distinctive honour upon their graduates, would fill a hiatus in our system of medical teaching. A supplementary school of practice, conducted on the plan proposed, would obviate the objections now made to clinical instruction, and do away very much with the sentiment or feeling of jealousy entertained towards the medical schools in the country, which not only do great good, but prevent infinite evil. How they do this is best understood by those members of the Association who come from sections of the country sparsely populated. They are best aware how many young men without their instrumentality, would pass from the office of the private preceptor, without the advantages these schools can give them, wanting in that professional *esprit de corps*, which the associations of the anatomical theatre and the lecture-room do so much to foster the growth of in the breast of every graduate who recognizes the influence of a medical *alma mater*. This Committee, then, would not discourage the organization of medical schools in different sections of our country, but would foster them as places fitted and designed to teach the elements of the science of medicine, and trust to the influence and example of the private instructor, who is emphatically the true clinical teacher, and to the hospitals, as schools of practice, to teach the art of applying the principles which the faculties of these schools have imparted. In this way the number of uneducated young men now permitted, by the absence of salutary laws in all the States of the Union, with only one exception, to exercise the functions of physicians, will annually diminish, and be replaced by those having a higher sense of professional honour, because a wider range of professional attainments."

The report closes with some very sound remarks on the necessity of a more thorough and extended course of preparatory study before commencing that of medicine.

The following resolutions are appended:—

> "1. That the Association reaffirm its formerly expressed opinions on the value and importance of general education to the student and practitioner of medicine, and that it would gladly enlarge its rule on this subject, so as to include the Humanities of the schools, and the natural sciences.
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> "2. That, in the opinion of this Association, a familiar knowledge of the elements of medical science should precede clinical instruction.
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> "3. That, in order to accomplish the latter, the hospitals, when they shall be elevated to the rank of schools of practice, and the intelligent private preceptor, are the most effectual instrumentalities to be employed."

The Report on Medical Literature, which follows, is by N. S. Davis, M. D., of Illinois.

It is a well-written and very sensible report, doing full justice to the general character of our native medical literature, not losing sight of its more prominent defects, and presenting a few sound practical suggestions for its improvement.

We should be pleased to quote largely from this report, but fearing to extend this review to an unreasonable length, we shall restrict ourselves to the following remarks of Dr. Davis on the general character of our medical periodicals.

> "Judging from the comments made by the several committees on medical literature heretofore appointed by the Association, we are constrained to believe that a decided improvement has taken place in the original department of medical journalism during the last two years. Certain it is that the use of the microscope, and its application to physiological and pathological researches have become familiar to a much larger number of the members of our profession; and an increasing disposition to enter upon those inquiries requiring original experiments and a thorough knowledge of organic chemistry, is plainly visible to the careful observer. That much of this is due either directly or indirectly to the influence of this Association, and its auxiliary Societies in the several States, is undoubtedly true.
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> "But while we have derived much pleasure from the examination of some portions of our periodical literature, we are constrained to acknowledge that other parts of it are extremely faulty, if not entirely worthless. Thus, we find some articles embodying allusions to cases of disease or injuries, so meagre and incomplete in details that neither the writer nor any one else can deduce a conclusion from them; or, in some instances, be certain of the nature of the disease or accident intended to be described. These seem to answer no other purpose than to fill a certain space in the *Journal*, and afford the author the pleasure of seeing his name in print. Another class of articles, equally defective, and far more mischievous, are made up of what is intended for a report of individual experience in the treatment of some particular disease, and hence are generally regarded as *eminently practical* in their character. They most frequently commence by stating the residence of the writer, and the fact that within a certain length of time a particular disease, or class of diseases, has prevailed to such an extent that 'a specified number of cases has come under his own observation.' Perhaps a brief description of some of the leading symptoms is given, couched in the most general terms; and sometimes a vague opinion is expressed in regard to the causes and pathology of the disease. An outline of the treatment adopted, with its effects, stated in terms equally general and indefinite, completes the article. The object of such writers seems to be simply to set forth the efficacy of some particular remedy in the treatment

of a particular disease. Hence, they omit altogether a clear statement of the topography of their locality; the particular season when the disease was most prevalent, the character and habits of the class most affected, and such an accurate and detailed description of the disease, with its effects on the various organs and functions of the system, as will enable the reader either to judge correctly of the true relations of the remedies employed to the course and termination of the disease, or to compare it with the phenomena of the disease called by the same name in his own locality."

We pass over the judicious remarks of the reporter on the general character of the review department of our medical journals—a most important one if faithfully and ably conducted.

Dr. Davis maintains that we have a respectable and valuable medical literature of our own, which is every year rapidly increasing in extent and importance. He denies the charge that in medicine we are mere copyists and servile followers of our transatlantic brethren.

"Deriving," he remarks, "our existence as a nation from Great Britain, existing, indeed, for a long period as a part of that empire, we necessarily inherited at our birth a portion of her science and her literature, which furnished the basis for our own. And, for a long period, also, the circumstances and habits of our countrymen, and especially of the members of our profession, were not favourable to the cultivation of the more abstruse and experimental branches of science. Hence, for the advancement of experimental physiology, animal chemistry, and the minuter researches in morbid anatomy, we have been mainly indebted to Europe. But, notwithstanding this, we have had a medical literature of our own; not borrowed, not a mere imitation, but originally and truly American, from the days of Benjamin Rush to the present time. As we should expect, in a thinly populated country, subject to the prevalence of acute diseases of an active grade, the chief attention of the profession was concentrated on matters of direct practical interest and application. A direct inquiry into the history, causes, and treatment of the more important diseases would be the first subject of the practitioner.

"The same circumstances that were unfavourable to the carrying on of abstruse and experimental investigations were equally adverse to the production of extensive treatises on any of the departments of science. Hence, as the attention of the profession was fixed chiefly on topics of immediate practical interest, it naturally found its expression in essays, monographs, and periodical journals, rather than in volumes requiring more leisure for their preparation, and involving greater expense in their publication."

On the "Agency of the Refrigeration produced by Upward Radiation of Heat, as an Exciting Cause of Disease." The report on this important question in etiology, presents a very fair abstract of the philosophy of the subject, and of the leading facts having a direct relationship with it. It is calculated to direct attention to a frequent cause of disease, that has heretofore been too much overlooked, but which, we suspect, will be found, upon a closer investigation, to play a more important part in the production of what have been denominated malarious diseases, than any supposed poisonous emanations from the soil, or miasms resulting from the decomposition of vegetable matter. The efficiency of the refrigeration produced by upward radiation of heat as an exciting cause of disease, has been clearly established, but all the circumstances under which its morbific influence is manifested have not been determined. To those who have the opportunities presented to them for its prosecution, a careful investigation into the extent of its operation as an etiological agent, the subject is recommended as one favourable for the development of highly interesting and valuable results.

The report before us, although an able exposition of the present state of our knowledge in respect to it, possesses but little originality; it is to future observations that we must look for a full and practical development of the subject in its relationship to the causation of disease.

The next report in order is that of Dr. S. D. Gross, of Louisville, Kentucky, on "The Results of Surgical Operations in Malignant Diseases." This is a most able and valuable report on a question of the deepest interest to every surgeon; in elucidation of which, it presents all the more important facts and observations derived from the writings of the ancient and modern authorities, and from the communications of numerous contemporaries, with a series of practical deductions that render it at once a faithful and instructive monograph on one of the most perplexing points connected with the surgical treatment of malignant diseases.

The first part of the report is devoted to general observations on the nature, objects, and difficulty of the inquiry to which it is devoted; on the origin of malignant diseases—their hereditary nature—their latency—their reproductive tendency after removal; on the circumstances contraindicating surgical interference—general rules respecting the manner of conducting the excision of malignant tumours, and the treatment after the operation. Each of these points is investigated with the utmost candour; truth alone, irrespective of a preconceived hypothesis, being the end evidently aimed at by the author. It is admitted that the results arrived at are often rather negative than conclusive—that Dr. Gross has been more frequently obliged to indicate our entire ignorance on those points essential to a satisfactory settlement of the question as to the propriety of surgical interference in diseases presumed to be of a malignant character, than to lay down positive rules for determining the probable result of such interference in any given case; still, the result of his investigation is valuable, not only by directing attention to the insufficiency of our data for the formation of a correct diagnosis of malignant diseases, but, also, by teaching us caution and circumspection before determining on the excision of diseased parts, and still more, in giving any positive prognosis as to the ultimate favourable result of the operation.

> "It need hardly be said," remarks Dr. Gross, "that the subject intrusted to the Committee is one of great perplexity. On every side, in fact, it presents difficulties which, in the existing state of the science, are absolutely insurmountable, notwithstanding the numerous attempts that have been made to remove them. The information collected in this report, if useful at all, is so rather negatively than positively. It shows what has been done, rather than what has been achieved. It proves that this department of the healing art has been more 'laboured than advanced.' In short, it exhibits the humiliating evidence that our professional brethren, although they often wandered in quest of Truth, have hitherto failed to find her; and that the great subject, in point of fact, remains precisely where it was in the time of Hippocrates, whose wonderful sagacity induced him to declare, that malignant diseases, by whatever name they may be known, or whatever organ they may attack, never forgive, but that they are always incurable by the knife and escharotics, and sooner or later destroy their victim.
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> "Much of the perplexity here alluded to, grows out of the difficulty which attends the diagnosis of malignant diseases and malignant tumours. Few men, whatever may be the amount of their science, experience, and tact, are able at all times, or in all cases, to discriminate, with positive certainty, between these affections and those called non-malignant, benign, or innocuous; while the great majority find themselves utterly bewildered at every step of the inquiry. It is not difficult, therefore, to account for the errors which are constantly committed in practice, and to explain the reason why a tumour or disease which one surgeon regards as malignant, should be considered as benign by another, and *vice versâ*. The daily experience of medical men, and the records of the profession, abundantly verify the truth of these remarks. The mammary gland

> has been sacrificed a thousand times for diseases supposed at the time to be cancerous, but which, upon a more careful examination, proved to be nothing but 'milk-knots,' scrofulous swellings, or chronic abscesses. A testicle, affected with sarcocele, or chronic enlargement, has frequently shared a similar fate. There is not a museum or private collection anywhere in the country that does not afford multiplied proofs of the truth of this statement.
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> "Another source of difficulty is, that a majority of the recorded cases of malignant diseases are deficient in necessary details; thus rendering it impossible to use them for statistical purposes. This remark applies both to our periodical literature, to our systematic treatises on surgery, and to our monographs on cancerous affections. As a proof of the truth of this remark, I may here state that one of the most interesting, and, in other respects, valuable works of the present day, the recent production of Dr. Bennet, Professor of Medicine in the University of Edinburgh—on cancerous and cancroid growths—hardly contains a solitary case available to our present inquiry. While it describes with great minuteness the histological characters of carcinomatous and cancroid diseases, as they appear in different tissues and organs of the body, it generally takes no other notice of the patient after operation than to say that he was discharged cured at such a time; meaning of course, merely that his wound had healed, and not that he had been permanently cured of his cancer, a circumstance of which no operator can justly judge in so short a period.
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> "It is for those reasons, that the whole subject of operation for malignant diseases must be investigated *de novo*, before we can hope to arrive at any satisfactory conclusions respecting it. The next quarter of a century will, if practitioners are true to themselves, and to their profession, definitively settle this long agitated, important, and momentous question. Let every description of cases be subjected to the knife and to escharotics; let every circumstance, even of the most trifling character, regarding them, be faithfully recorded; let the morbid structure be carefully examined with the microscope; and, finally, let the patient be diligently watched with a view to his ultimate fate; and a thousand such cases, brought together and analyzed, will forever put the matter at rest. All conjecture will then cease, and truth will stand forth, like a beacon light, to guide and direct the practitioner in the true path of science."

The second part of the report presents a series of general observations on cancer, in relation to the results of operations, embracing facts, and statistical tables contributed by distinguished American surgeons, and gleaned from American and European authors; while the third part of the report treats of cancer of particular organs, in the same relation, embracing the views as well of the most ancient authorities, as of the more recent authors and practitioners of America, England, France, Germany, Holland, Denmark, and Italy; more especially in reference to cancer of the mammæ.

Admitting the correctness of Dr. Gross's definition of a malignant disease, it must be evident that the question in regard to the propriety of its extirpation by a surgical operation, is limited to this: How far shall we be able, by the removal of the diseased part, to prolong the patient's life; and secure to him, for a shorter or longer period, an interval of comfortable existence? The idea of effecting by means of a surgical operation an entire eradication of the disease is precluded by the very terms of the definition.

> "A malignant disease is," according to Dr. Gross, "one which, whatever may be its origin, situation, or structure, has a disposition, sooner or later, to destroy, not only the part which it occupies, but also the system at large, and, consequently, as a necessary corollary, the life of the patient. In other words, all its tendencies are to mischief and disorganization. It never forgives or relents; it never disappears spontaneously; and it is never cured by medication, not even by excision, except, perhaps, in very rare cases."

In collecting, collating, and arranging in a methodical form the facts and observations embraced in the second and third parts of this report, Dr. Gross has done a good work. The practical surgeon will here meet with much that will prove valuable in assisting him to form a decision as to the propriety of an operation in cases of disease having a malignant aspect, and which he could not otherwise have obtained without laborious research amid many books, some of them not easy of access to all, and through the pages of the professional journals, both foreign and domestic.

To understand the entire scope and value of the report under consideration, it must be attentively perused as a whole; no clear idea of it can be conveyed by an abstract, nor yet by an occasional quotation from its different sections. As in all investigations of the nature of that undertaken by Dr. Gross, the questions involved in which must be solved by testimony derived solely from experience and observation, the amount and character of the evidence adduced is of primary importance; consequently, to judge of its relevance and conclusiveness, it must be examined in detail. We close, therefore, our brief notice of the report of Dr. Gross, by recommending it to the careful consideration of American surgeons, merely appending the general conclusions at which its author has arrived.

> " From the facts and statements which have now been presented," he remarks, " embracing the opinions of many of the most intelligent, experienced, and distinguished practitioners in different ages, and in different parts of the world, the following conclusions may be legitimately deduced:—
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> " *First.* That cancerous affections, particularly those of the mammary gland, have always, with a few rare exceptions, been regarded by practitioners as incurable by the knife and escharotics. This opinion, commencing with Hippocrates, the father of medicine, has prevailed from the earliest records of the profession to the present moment. Nature never cures a disease of this kind, nor can this be effected by any medicine or internal remedies known to the profession.
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> " *Second.* That excision, however early and thoroughly executed, is nearly always, in genuine cancer, followed by a relapse, at a period varying from a few weeks to several months from the time of the operation.
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> " *Third.* That nearly all practitioners, from the time of Hippocrates to the present day, have been and are still averse to any operation for the removal of cancerous tumours after the establishment of ulceration, rapid growth, firm adhesions, organic change in the skin, lymphatic invasion, the cancerous dyscrasy, or serious constitutional derangement; on the ground that, if had recourse to under these circumstances, the malady almost inevitably recurs in a very short time, and frequently destroys the patient more rapidly than when it is permitted to pursue its own course.
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> " *Fourth.* That in all cases of *acute* carcinoma, or, in other words, in all cases of this disease attended with very rapid development and great bulk of the tumour, extirpation is improper and unjustifiable, inasmuch as it will only tend to expedite the fatal result, which, under such circumstances, always takes place in a very short time.
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> " *Fifth.* That all operations performed for the removal of encephaloid cancer and its different varieties, are more certainly followed by rapid relapse than operations performed upon scirrhus or hard cancer.
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> " *Sixth.* That in nearly all operations for cancerous diseases hitherto reported, the history has been imperfectly presented, being deficient in the details which are necessary to a complete and thorough understanding of the subject in each case. This remark is particularly true in reference to the diagnosis of the malady, the minute examination of the morbid structure, and the history of the case after the operation, as to the period of relapse, the time and nature of the patient's death, and the result of the *post-mortem* examination.
>
> " *Seventh.* The cancerous affections of the lip and skin, now usually described under the name of cancroid diseases, are less liable to relapse after extirpation than genuine cancerous maladies, or those which are characterized by the existence of the true cancer-cell and cancer-juice.

"*Eighth.* That although practitioners have always been aware, from the earliest professional records, of the great liability of cancer to relapse after extirpation, a great majority of them have always been, and still are, in favour of operating in the early stage of the disease, especially in scirrhus, before the tumour has made much progress, or before there is any disease of the lymphatic ganglions, or evidence of the cancerous cachexy.

"*Ninth.* That many cases of tumours, especially tumours of the breast and testicle, supposed to be cancerous, are in reality not cancerous, but of a benign character; and, consequently, readily curable by ablation, whether effected by the knife or by escharotics. It is to this circumstance that we must ascribe the astonishing success which is said to have attended the practice of Hill, of Scotland, Nooth, of England, and Flajani, of Italy.

"*Tenth.* That all operators insist upon the most thorough excision possible: removing not merely the diseased mass, but also a portion of the surrounding and healthy tissues, as well as all enlarged and indurated ganglions.

"*Eleventh.* That the practice has always prevailed, and still obtains, to save, if possible, a sufficient amount of healthy integument to cover the wound; and to unite, if possible, the wound by the first intention; on the ground that these precautions will tend much to retard, if not to prevent, recurrence of the disease.

"*Twelfth.* That much stress is laid by writers upon a properly regulated diet, and attention to the bowels and secretions after operation, as a means of retarding and preventing relapse.

"*Thirteenth.* That there is no remedy, medicine, or method of treatment, which has the power, so far as we are enabled to judge of its virtues, of preventing the reproduction of the morbid action after operation, no matter how early or how thoroughly it may be performed.

"*Fourteenth.* That life has occasionally been prolonged, and even saved, by operation after relapse, as in some of the remarkable cases mentioned in a previous part of this report; but that, as a general rule, such a procedure is as incompetent to effect a permanent cure as a first extirpation.

"The following points may be considered as of an unsettled character; at all events, opinion respecting them is much divided, and farther observation is necessary before they can be positively determined, either affirmatively or negatively.

"*First.* Excision is of doubtful propriety in all cases in which the disease is of hereditary origin, or where it occurs in several members of the same family.

"*Second.* It is doubtful whether an operation should be performed when the patient is very young and the disease is of rapid growth. There is reason to believe that surgical interference, in such a case, will only expedite the fatal issue, which is generally inevitable.

"*Third.* It is problematical whether an operation should be performed when the disease is attended by suppression of the menses, or by great irregularity of this discharge.

"*Fourth.* Not a few surgeons regard a resort to the knife as of questionable efficacy where there is a quickened state of the pulse, occasioned by the local irritation.

"*Fifth.* There appears to be no general agreement among surgeons as to whether extirpation is proper when there are two or more coexistent and accessible cancerous tumours.

"*Sixth.* It is supposed, but the fact is not established, that excision of carcinomatous tumours only tends to hasten the patient's death.

"*Seventh.* It is doubtful whether, as has been asserted by different surgeons, the prospect of a permanent cure is greater, all other things being equal, after an operation on an old cancer, than after an operation on a cancer of recent standing.

"*Eighth.* It has been stated by writers of great respectability, among others by Dr. Macfarlane, of Glasgow, that in robust women of sanguine temperament the reappearance of cancerous disease, and its subsequent progress, are more rapid after operation than in nervous or lymphatic persons; an assumption demanding verification.

"*Ninth.* It requires to be proved whether excision ought to be performed in the ulcerated stage of malignant disease, as a means of prolonging life and of procuring comparative relief from suffering."

Only one of the eight committees appointed to report on the epidemic diseases of the different sections of the United States, was prepared to present a report at the last session of the Association; namely, that having in charge the report on the diseases of Tennessee and Kentucky.

The report is drawn up by Dr. W. L. Sutton, of Georgetown, Kentucky, the chairman of the committee, and it does him great credit for its clearness and methodical arrangement. From the materials derived from his own field of observation, and such as were furnished him by his colleagues and others, Dr. Sutton has presented a very interesting view of the topography and meteorology of different parts of the section of country embraced in his report, and of the more important of the diseases that prevailed there during the past year, with the treatment pursued in each by different physicians and in different localities. The account given of the several diseases is followed by a table showing the liability to them of different ages, sexes, and colours, as well as the mortality, and the average duration of treatment.

The report comprises much of an interesting and instructive character. We can at present notice only the account it contains of "An Anomalous Form of Fever, which prevailed at Memphis, Tennessee, late in the Fall of 1852."

The cases of this fever were observed at a time when scattering cases of cholera were occurring, and the reporter suggests whether they may not have been produced by the commingled influence of the malarious and choleraic poisons.

The disease made its appearance during the first and second weeks of November, being the week before and the week after the first frost of autumn.

"Its early cessation after the commencement of cold weather," it is remarked, "would seem to indicate its connection with *malaria;* but still it differed, in the malignity of its symptoms, from the well-marked cases of remittent fever, prevailing at the same time.

"The attack, in most of the cases, was not preceded by any marked indisposition. Chilly sensations, or a well-marked cold stage, of short duration, ushered in the disease. The reaction which followed was attended by intense heat of the surface, eyes more or less injected, circumscribed flushing of the cheeks, pain in the back, headache, pulse ranging in different cases from 90 to 120 beats in the minute, and continuing throughout the entire course of the attack, feeble and unresisting; the tongue at the commencement showed little evidence of departure from a normal appearance, but soon began to exhibit a line of dry and elevated papillæ, extending back along its centre, which continued to widen, of a dark brown colour, exhibiting a notable contrast with the more or less smooth and red tip and edges of that organ. The thirst for cold drinks was intense. There was tenderness on pressure over the epigastrium. Nausea, and frequent vomiting of pale green fluids were troublesome symptoms. The bowels were not moved except by medicine, when the dejections were quite fluid at first, and of a pale green colour. The urinary secretion was small in quantity, and highly coloured, giving off a strong ammoniacal odour. Hemorrhage from the nose was common; in a few it occurred both from the nose and bowels; and in one case, blood flowed from these, and likewise from the uterus, in considerable quantity two weeks after the last menstrual period. Sleeplessness and jactitation were absent in no instance. Little or no delirium present, intellect clear. No eruptions discoverable. Great prostration of the vital powers present in all. The duration of the fever was from five to fifteen days, most of the cases being convalescent during the first week. It had, like those called continued, its morning periods of partial remission, but they were not the clearly-marked remissions of the paroxysmal fevers prevailing at the time.

"Taking into consideration the unpromising symptoms just detailed, the disease yielded more readily to treatment than would appear probable." "The remedy which in our hands appeared to exercise the greatest influence over the symptoms was *mercury*. After the bowels were evacuated, our reliance was placed on small doses of calomel and opium, repeated as often as the urgency of the symptoms in different cases required, and steadily persevered in until the disease yielded, which always took place on the first appearance of the constitutional effects of the medicine. As adjuvants, we employed local depletion and counter-irritants to the epigastrium. Iced lemonade, or pure iced water, or powdered ice, were freely allowed, and contributed not a little, we feel assured, in allaying gastric distress, and adding to the comforts of the sick. The great and infallible remedy in the treatment of periodic fevers, did not succeed in the disease under notice, though a full and fair trial was made with it in several instances. Even as a tonic, after the subsidence of the disease, quinia did not appear to answer so well as the mineral acids.

"The quantity of blood lost by some of the patients in this disease, and the manner in which the apparently prostrated vital energies sustained themselves under the loss, were truly astonishing. So far from being really injurious, we believe that the hemorrhage from the bowels was of signal service in relieving the congested capillaries of the intestinal mucous membrane, as no death occurred where this condition was present. To restrain the hemorrhage within the bounds requisite for the safety of the patient, as well as to impart the salutary influence which it is generally believed to exert over the diseases of the mucous membrane, the spirits of turpentine was administered in small and repeated doses, with most signal advantage in the cases we are considering.

"It is a fact worthy of note that, so far as we have been enabled to learn the subsequent history of these cases, not an instance of relapse has supervened since recovery, now four months after the attack."

The report of Dr. Sutton is followed by that of Dr. Charles D. Meigs, of Philadelphia, on "Acute and Chronic Diseases of the Neck of the Uterus."

This admirable report is not presented by its author as a complete monograph on the diseases of which it treats. It is perhaps, in many points, even more valuable than if such a character had been attempted to be imparted to it; presenting as it does, distinctly, the clinical observations, in respect to some of the more frequent of the affections of the cervix uteri, of one who has devoted years to their careful study, in a wider and more favourable field for their investigation than is furnished to the generality of practitioners. The report is confined simply to a plain statement of the subjects embraced in it, as they have appeared to its author, with the addition of such explanations, illustrations, and advices concerning treatment, derived from his personal experience, as have appeared to him may prove useful in aid of clinical practice in an important and extensive department of medical and surgical treatment.

The descriptions and explanations—the views and instructions of the reporter—are illustrated by the details of cases that have fallen under his own immediate notice, the whole being accompanied by very faithful coloured drawings from nature.

To one who will carefully study the report of Dr. Meigs, it is calculated to convey more precise and definite views of the subjects of which it treats, than most of the treatises formally devoted to their consideration; and at the same time to furnish him with useful practical hints, in reference to the exploration, diagnosis, and management of a class of diseases in which he is liable almost daily to be consulted, derived from the ample experience and matured observation of its distinguished author.

The entire report is a very favourable example of the mode in which the results of individual experience may be rendered immediately available for the instruction of every member of the profession—in which the personal knowledge of one may be made the common property of all.

For his present contribution we return to Dr. Meigs our sincere thanks.

We fully concur in the earnest desire, expressed by him in the close of the report, that the class of cases therein treated of, may receive a greater share of attention from his medical brethren; so that they may less frequently than heretofore be permitted to accumulate in the large cities and towns, or in the hands of specialists. And we are convinced that the present very able report will contribute much to the realization of this desirable result.

With Dr. Meigs, we believe that, inasmuch

> "As such disorders require no greater amount of particular information or dexterity than other surgical and constitutional maladies, it is within the ability, and is the duty of the brethren generally, to conduct them safely and gently to a satisfactory cure. In our opinion, it would be much more creditable that such skill and discrimination should belong generally to the whole profession, than for one or two individuals in a district, or in a great metropolis, as London or Paris, to acquire a notoriety which, to say the least of it, is scarcely enviable; since, among the humiliating services that physicians and surgeons are by their vocation obliged to render to the distressed, none can be more revolting to the sensitive mind than these. It might, perhaps, with consoling truth, be added, that few professional ministrations turn aside, with greater certainty and celerity, the attacks of disease, or arrest the shafts aimed at the existence of our clients."

It is not our intention to attempt an analysis of the report of Dr. Meigs. Its character is such, indeed, as to prevent this being done in any satisfactory manner. The information it imparts is rather in the form of demonstration than didactic or argumentative, and they who desire to profit by that information must study the entire text of its author, and the details of the cases presented by him, in connection with the pictorial illustrations by which they are accompanied. In no other way can the entire bearing and full value of his clinical remarks be correctly appreciated.

The report commences with a few pertinent remarks on the importance and propriety of ocular inspection by means of the metroscope, in order to the formation of a correct diagnosis of the several diseases to which the cervix uteri is liable.

Dr. Meigs prefers the simple metroscope of Recamier, which appears well adapted to bring into view the different portions of the uterine neck, and to facilitate the application of remedies directly to the seat of disease.

Allusion is made to the reaction of the productive organs upon the other members of the animal economy of the female; and the physiological hypertrophy to which the uterus is repeatedly subjected during the period of childbearing, is pointed out as a predisposing cause of many of its diseases.

Some interesting demonstrations are also given of the normal size, form, and position of the womb, to serve as a standard of comparison by which to judge of its abnormal changes in these respects.

The first of the diseases of the uterine neck noticed in the report before us is inflammation. Adverting to the extreme frequency of leucorrhœa in the female, Dr. Meigs remarks:—

> "Where the leucorrhœa consists only of vaginal products, it may safely be assumed that such leucorrhœa is of very little consequence as to the woman's general health. We speak here of the moderate cases. Indeed, affections of the vagina may, for the most part, be considered to interest very little the female constitution. Such a statement as this might excite surprise in

> those who are accustomed to hear of the very debilitating effects of fluor albus; and it becomes necessary to qualify the statement by showing that, in those cases where the health has appeared greatly to suffer, the essential malady is not in the vagina, but in the neck of the uterus itself.
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> "While our own observation convinces us that profuse vaginal secretion is rarely met with in practice, we are equally convinced that some of the patients are rendered too moist by excessive activity of Duverney's glands, and that the most mischievous of leucorrhœal evacuations is that which comes from the canal of the cervix uteri.
>
> "The muciparous glands of the vagina furnish either a thin watery mucus, or one of a creamy consistence, which, in other instances, is almost butyraceous, or concrete. The excretion from the follicles and glands of the canal of the neck is always gluey or albuminous, and resembles fresh white of eggs; and when the patient, in describing the disorder, informs us that she discovers a slimy mucus, and especially if it appears at intervals of once a day or oftener, we may take for granted that she labours under inflammation of the neck of the womb. There is no apparatus in the vagina itself for the secretion of this albumen, but the abundant follicles of the canal of the cervix are devoted solely to such production; when the cervix is chronically inflamed, that production is much increased, to that degree, indeed, as to impart a character of sliminess to the discharges, and make it resemble *albumen ovi.* It very often happens, to observe this transparent viscid mucus to be wholly unaccompanied by any vaginal excretion; the substance coming away from the os uteri, and escaping upon the napkins, without the least admixture. In using the metroscope, the same albuminous matter is observed oozing forth from the orifice of the womb only, and so tenacious that it cannot be wiped away with the sponge."

According to Dr. Meigs, therefore, "the albuminous leucorrhœa is a sign of inflammation of the cervix, in which is included the canal, with its copious muciparous apparatus," and the case is to be treated accordingly.

The so-called raspberry coloured and other forms of inflammation, with simple hypertrophy of the neck of the uterus, are well described and clearly illustrated. Most of these inflammations and their accidents the reporter avers may be cured, and that speedily, by means of antiphlogistic contacts of the solid nitrate of silver, few of them being attended with the slightest ulceration.

> "It is a common opinion," Dr. Meigs remarks, "and it is generally agreed to say so, that these affections are ulcerations of the womb, and there are people who seem never to fail to discover an ulcer upon making an examination with the speculum matricis. An immense experience in a populous metropolis —an experience greatly increased by the resort of numerous invalids from the country, and from the different United States, enables us, with confidence, to declare that an ulceration of the womb is among the rarest of disorders. We repeat the expression of our opinion, that these disorders and *framboisée* inflammations and hypertrophies of the cervix, have been misinterpreted, and accounted as ulcerations, which they are not, the superficies being covered with a delicate epithelium, yet so very delicate as readily to give way and suffer abrasion under improvident, unskilful manipulation with the tube or the sponge."

Dr. Meigs speaks of contacts of the nitrate of silver as antiphlogistic contacts; he thus explains his meaning in the use of that phraseology:—

> "It is undeniable that a pencil of nitrate of silver applied to a soft, moist, living tissue, and held long in contact with it, will disorganize the tissue, and so prove to be a destructive contact. It is equally undeniable that a contact may be effected with such rapidity and lightness as to prove ineffective or indifferent, while there is another mode or force which does resolve inflammation with great certainty; and this is the antiphlogistic contact above spoken of. We feel, therefore, warranted to speak of such use of the nitrate of silver as

being either destructive or indifferent, or antiphlogistic contacts; and experience confirms the propriety of the classification; for, we meet with numerous examples of treatment that conclusively prove it is not the mere treatment by escharotics that is so successful, but the use of them in such a way as to provide for their due operation as antiphlogistics and not as destructives."

Retroversion of the uterus is noticed by Dr. Meigs, from the belief that this malposition of the organ so far interests the state of the cervix, as to bring it within the scope of his inquiries into the acute and chronic affections of the latter.

He has long "been fully convinced," he remarks, "that retroversion of the womb constitutes seventy-five per cent. of all cases of sexual disorders, of a gravity sufficient to require appeal to medical advice. This," he adds, "may, at first, appear to be an exaggerated estimate, but it will probably be found sustained by statistical experience."

We cannot fully subscribe to the correctness of this statement; we are persuaded, from our own observations, that retroversion of the womb is an accident of less frequent occurrence than it is asserted to be by some, and that in many cases the sufferings and other morbid symptoms usually ascribed to it, result from other and very different causes. That retroversion does frequently occur, and is occasionally productive of the most serious results, we are perfectly aware. Dr. Meigs refers to extensive hypertrophy of the womb as one of its usual consequences, as well as the rapid return of the organ to its normal size upon being returned to and retained in its proper position.

A case is given and illustrated, showing the morbid changes which are liable to occur in the texture of the neck of the uterus, followed by a few brief remarks upon these changes, especially those of the inner wall of the cervix.

Certain cases of hemorrhage from the womb are noticed, with cases and illustrations showing their dependence upon raspberry-coloured inflammation of the cervix, or "small *vivaces*, or bunches of red cellular and capillary tissue, which are either found peeping out at the plane level of a somewhat patulous os tincæ, or jutting quite forth out of and beyond it, and attached by a delicate peduncle or footstalk."

A drawing is given exhibiting a case in which many such little excrescences were observed to jut forth of the opened os tincæ, looking not unlike so many very ripe red currants. In this case, it is is stated, there was hypertrophy of the womb to such a degree, as to allow the fundus to be felt quite two and a half inches higher than the plane of the superior strait.

The malignant degenerations of the texture of the cervix uteri are merely glanced at. In this connection, a case is given in which an apparently grave form of chronic disease of this part was treated with success. In this case, the reporter believes that if the disease was not actually malignant, it would have certainly become so, had it been allowed to run its own course. An interesting case of hygroma of the cervix uteri, with a firm fibrous tumour developed out of the substance of the fundus itself, while every other part of the organ retained the equable ratios of its several elementary or constituent tissues, is detailed and illustrated by a drawing.

The chief interest connected with this case is, that it shows very forcibly the importance of a cautious prognosis in all cases of uterine disease. In judging from the results of the pelvic examination, and the inquiries made at the surpubal region, one would have been led to pronounce a flattering prognosis, since no one would scarcely doubt of his ability to cure all the evident disorders of this womb, whereas a *post-mortem* examination proved that the chief malady was entirely beyond the reach of any known therapeutic means.

Displacements of the neck of the uterus, and their proper management, are next considered, and the report closes with a brief notice of polypus of the womb, with cases and drawings in illustration.

The sudden enormous effusions, generally greatest at the menstrual periods, to which those females who are labouring under polypus of the uterus are liable, is referred to. In many cases, this hemorrhage is present some time before the polypus commences to protrude beyond the os tincæ.

> "Many wombs," Dr. Meigs remarks, "are kept in a state of hyperæmia and hemorrhagical fulness by the presence and pressure of the polypus, and such cases are marked by the most violent floodings. Now, when we come to inquire diagnostically into such cases, and find, upon touching, that the os tincæ is unmodified, and the cylindrical neck unchanged, all that we can do is to infer, for we cannot know, that the hemorrhages are caused by a polypus in the cavity; whose existence, however, we can only conjecture or infer, and especially where the polypus is still so small as not greatly to magnify the womb, and make its increase perceptible to the touch in the surpubal region.
>
> "There can scarcely be found, in the whole region of medical duties, a more difficult case of diagnosis than this. Time alone can solve the problem, and then only by protruding the mass into the cervix, or out into the vagina, whereupon all doubt is at an end."

In the report we have just noticed, the teachings of its author are all deductions of clinical experience, and are enforced by facts falling within the immediate observation of the reporter. The report which succeeds, embracing "An Inquiry into the Nature of Typhoidal Fevers, based upon a Consideration of their History and Pathology," is of a very different character. The deductions of its author, Dr. Henry F. Campbell, of Augusta, are not from his own observations, but exclusively from the recorded observations of others. This comparison is not made in disparagement of the report of Dr. Campbell, which is highly creditable to him, and replete with interest and instruction. Notwithstanding the views advanced in it are not the result of clinical investigations conducted by the author, but, as he believes, are rationally deduced from recorded facts, they are not on that account less worthy of our serious consideration, or less likely to lead to important practical results.

The space we have already occupied will preclude our examining in detail the report of Dr. Campbell. The following quotation will give a general idea of the positions assumed by the author:—

> "From what has been already said in relation to the distinctive features of the two types of continued fever, typhoid and typhus, their interpretation, according to the pathology herein argued, will have been, doubtless, ere this naturally suggested. We have seen that *typhoid* fever is marked by an accelerated pulse, more or less nervous derangement, an altered condition of the blood, frequently a *mild* cutaneous eruption, diarrhœa, and meteorism. On *post-mortem* examination, we find lesions, viz. congestions and ulcerations of a peculiar character; that is, simulating those produced by experimental sections of the nerves in all those parts supplied by the *visceral* portion of the ganglionic system of nerves. On the other hand, we have seen that *typhus* fever is characterized by a somewhat more accelerated pulse, much more marked nervous derangement, the same altered condition of the blood, well-marked and always *serious alterations* in the capillary circulation of the *skin*, amounting often to actual ecchymosis, while the *post-mortem* examination shows almost entire exemption from lesion in the abdominal viscera. Thus we find that, while both diseases have all their general symptoms so exactly similar that we are forced to acknowledge their identity, and see in them what is essentially but one disease, yet typhoid fever has its principal and most prominent manifestations in the abdominal

viscera, internally; and typhus fever manifests itself in aberrations of the circulation, very analogous to those of typhoid, but occurring in the capillaries of the *cutaneous* surface.

"Now, the ganglionic pathology is the only theory by which such marked incongruities in the two forms of what, to the observation and scrutiny of every one, must ever appear as one disease, can be perfectly and satisfactorily reconciled. We cannot deny that the two are but types of the same disease; yet how incongruous and strange it is that, in certain cases (*typhoid*), diarrhœa and intestinal lesion should appear the main, the most important features; while in the other cases (*typhus*), undeniably of the *same disease*, even more grave and threatening, there should be not a trace of diarrhœa, and, on *post-mortem* examination, no intestinal lesion whatever; but, instead, serious disease and congestion of the *skin*, with subcutaneous sanguineous effusions, similar to the submembranous sanguineous effusions of the typhoid type. Indeed, from the very smallest degree of attention, must result the conclusion that, in the two cases, *the disease is one and the same*, but seated in different portions of the organism; and this conclusion will accord exactly with what we have considered the distinctive pathology of the two forms, viz. that in each type the disease is located in a different portion of the ganglionic system. There are certain portions of the system which are affected in both forms of the disease, as the ganglia supplying the heart; but, after this, the two types have entirely distinct and separate sets of ganglia, the morbid action in which gives rise to their respective manifestations.

"In *typhoid fever*, the *internal* or *visceral* isolated ganglia, such as the semilunar, etc., are the seat of the morbid action; and these, supplying mainly, we may say entirely, the abdominal viscera, and having but little connection with the other or external portions of the organism, these viscera become the seat of nearly all the morbid phenomena; while that little implication of the cutaneous surface and general nervous system, which we often observe, is entirely due to the remote and very obscure connection which their isolated ganglia may have with the nerves supplying these parts.

"Now, in the *typhus* type, the same disease or morbific agent (its exact nature we do not pretend to define) affects an entirely different set of nervous centres—a set of ganglia which, by their anatomical position, their internal and universal relations with the anterior and posterior roots of the spinal nerves, are plainly destined to preside over the capillary circulation of parts more superficial—the cutaneous surface. We have reference to the *vertebral* sympathetic ganglia; and in attributing the location of *typhus* fever to these ganglia, we have a ready and satisfactory interpretation of all its distinctive characteristics. The skin becomes congested and ecchymosed (petechial), because its circulation is dependent upon and controlled by innervation derived from these vertebral ganglia; which ganglia being the seat of abnormal action (perhaps paralysis), innervation is deficient; the cutaneous circulation is retarded; in certain places there is obstruction, with actual rupture and effusion, giving rise to petechiæ. The general (cerebro-spinal) system is more seriously involved in typhus than in typhoid fever, because the connection is more direct between the vertebral ganglia—which are the seat of typhus—and the cerebro-spinal system. In a word, then, we would locate *typhoid fever* in the *visceral* portion of the ganglionic system, and *typhus* in the *vertebral* portion."

The reports of special committees are followed by two very valuable papers. The first of these is by Dr. Alden March, of Albany, N. Y., on "Coxalgia, or Hip Disease."

This paper of Dr. March is one of deep interest. The facts adduced in it, and which appear to be very fully established and conclusive, entirely overthrow the commonly received opinions in relation to the pathological condition of the hip-joint in cases of coxalgia, and the cause of the deformity consequent upon the disease, as well as in relation to the proper treatment for the prevention and remedying of that deformity.

Dr. March shows that nearly every surgeon *assumes* that *spontaneous dis-*

location of the hip is not unfrequently the result of absorption, ulceration, or destruction of the ligaments of the joint and of the acetabulum, and of contraction of the muscles surrounding the joint. In opposition to this, the position assumed by him is, that *spontaneous dislocation* of the hip, as purely the result of morbid action, unaided by superadded violence, never takes place. And he points out a plan of treatment by which *progressive absorption* of the acetabulum and head of the bone may be arrested, before the life of the patient is endangered.

Dr. March has examined, with great care, some two hundred morbid specimens, dried and wet, of the condition of the hip-joint in cases of coxalgia, contained in over forty different anatomical and pathological museums of Europe and America; and from a study of these, as well as of patients affected with the disease, his conclusions as to its true pathology and proper management have been deduced.

> "I believe," says Dr. March, "all authors describe two principal forms of morbus coxarius, or hip disease; one, in which the inflammation commences in the cartilage; and the other, when the cancellous structure of the bone is the primary seat of the affection. In either case, the result may involve all parts of the joint, and prove equally destructive. That form of it in which the cartilage is the first part attacked, is not unfrequently met with in adults; whereas the scrofulous form, the other variety, is mostly confined to children and persons under the age of puberty. The hip-joint may be subject to other forms or varieties of disease: rheumatic inflammation, interstitial absorption, porcelaneous deposit, etc. But it is believed that the changes of structure consequent upon these affections, do not often simulate or counterfeit the symptoms of dislocation. I shall, therefore, confine my remarks mostly to the subject of *ulcerative absorption*, by which such changes have resulted in the articulation as have too often been called *dislocation*."

In the following manner, the reporter explains how all the symptoms of a dislocation can be present during life, when, in reality, on making a dissection after death, the head of the bone is not found lodged on the dorsum of the ilium.

> "The cartilage is absorbed, the round ligament is destroyed, and three-fourths of an inch of the upper part of the head of the bone has been carried away by ulcerative absorption. Simultaneously, the cartilage of the acetabulum is disposed of in the same way; the cotyloid ligament, at the upper and back part, is destroyed or removed from the margin of the acetabulum, and the socket is elongated or enlarged three-fourths of an inch in the upward and backward direction. By the action of the fore part of the *gluteus medius*, which lies in juxtaposition with the upper and back part of the capsular ligament, and by the *tensor vagina femoris*, when aided by the action of the *psoas magnus* and *iliacus internus muscles*, the *foot is inverted*, and the *thigh is flexed* on the *pelvis*, and strongly *adducted*, by which the *trochanter major* is made to project, and to occupy a position nearer the *anterior superior spinous process* of the ilium than in the normal condition; and by the thickening of the capsular ligament, and by effusion of serum and lymph in the cellular tissues, and in the *glutei muscles*, a prominence is observed which has been regarded as the head of the bone *lodged* on the *dorsum of the ilium*.
>
> "By the destruction of three-fourths of an inch of the head of the bone, and by absorption and elongation of the acetabulum upward and backward to the same amount, if these two parts remain in contact, as it is contended they do, by the action of the glutei muscles, then we have an inch and a half of shortening of the limb."

The treatment of coxalgia proposed by Dr. March is extension and counter-extension by means of splints, so as to keep the limb in a state of perfect repose, and to take off all pressure from the diseased surfaces of the acetabulum and head of the femur. A treatment which he believed was peculiar to himself, as no notice of it is to be found in any of our systems of surgery. Its rationale is thus explained:—

> "In the advanced stage of the disease, the cartilages of the acetabulum and of the head of the bone are destroyed; the carious and loose spongy bony tissue is covered with coagulated lymph, and this, adhering to the surfaces of the bones, becomes highly vascular. Now, if these two surfaces, thus covered with organized or organizable matter, could be kept in easy apposition and at rest, without too much pressure on the one hand, and on the other, without exerting too much separating or sundering force, in many instances a bony anchylosis would be the result. By the pressure of the muscles that act on the head of the bone and acetabulum, in addition to ulcerative absorption, we get progressive absorption, and hence the great destruction of the osseous parts of the joint." "In the early stage of the disease, before shortening or distortion of the limb takes place, it will be important to resort to the use of the long splint to maintain the joint in a state of rest, that the inflammation may subside."

Dr. March remarks that the long splint of Dr. Physick was calculated to fulfil a part of the above indications—relief from pressure of the upper part of the head of the bone, and the upper and marginal part of the acetabulum.

> "But," he adds, "in fixing it to the whole length of the limb, and to the trunk nearly as high up as the axilla, there must necessarily be a considerable amount of pressure on the outer face of the trochanter major, the tendency of which would be to produce absorption of the head of the bone occupied by the attachment of the ligamentum teres, and of the deep part of the acetabulum, so that the diminished head and neck of the bone might be thrust through into the cavity of the pelvis, which I have actually seen."

Dr. March gives a description and drawing of a form of splint which he believes to be adapted to fulfil the indications had in view in the treatment laid down by him, without any of the disadvantages just referred to as liable to result from the ordinary long splint.

The entire paper of Dr. March is deserving of a close and candid examination on the part of every practitioner. We believe that the facts and reasoning it adduces are calculated materially to modify the views almost universally maintained in regard to the pathology of coxalgia, or hip disease, and to suggest a plan of treatment better adapted than any now in general use to prevent serious deformity and lameness, if not to preserve the movements of the affected limb.

The second paper is by Dr. Gurdon Buck, of New York city. It is on "The Surgical Treatment of Morbid Growths within the Larynx, illustrated by an Original Case and Statistical Observations, tending to elucidate their Nature and Forms." It is a highly valuable contribution, throwing much light upon an affection which, though not of very frequent occurrence, is insidious in its commencement, often obscure throughout its progress and in its diagnosis; and most distressing in its symptoms, so soon as the morbid growth in the larynx has acquired any size.

The analysis which Dr. Buck presents of the cases on record of this disease furnish all the leading facts, so far as they have been observed and noted, in relation to the sex and age most liable to its occurrence; the causes that may be suspected to produce it; its distinctive phenomena, duration, and modes of termination.

The result of the disease, when left to itself, is almost necessarily fatal. In only one of the cases collected by Dr. Buck were the efforts of nature competent to detach and expel the foreign growth, the expulsion being followed by recovery. In another case, several portions of the tumour were expelled by coughing, with temporary relief to the respiration and voice. In a third case, the tumour was found detached and free in the trachea; but suffocation took place before it could be expelled. "In the progress of the disease," Dr. Buck remarks, "when once suffocative paroxysms have become established, the danger of suffocation is imminent, and the catastrophe may occur at any moment."

Surgical aid appears to be our only resource for the relief or cure of this formidable disease. For observations on the particular mode of applying it, and the probable success that may be expected to follow it, our readers may consult with profit the interesting paper of Dr. Buck.

The next article is a short paper by Dr. Henry F. Campbell, of Georgia, in which that gentleman lays claim to priority in the enunciation of the doctrine that there exists a reflex relationship between the sympathetic and the cerebro-spinal systems of nerves, which has been recently claimed by Dr. Bernard, of Paris, as an observation entirely new and original with him. Dr. Campbell has shown that, at least, priority of publication is with him.

The two essays to which prizes, of one hundred dollars each, were awarded by the Association, at its recent session, complete the contents of the present volume of *Transactions.*

The first of these prize essays is "On the Surgical Treatment of Certain Fibrous Tumours of the Uterus, heretofore considered beyond the Resources of Art." By Dr. Washington L. Atlee, of Philadelphia.

The essay consists, in great part, of the detailed histories of fourteen cases of the extraction of tumours from the cavity of the uterus, or from within the substance of its parietes, by operations of certainly a very bold character. In the majority of these cases, the extraction or destruction of the tumour was effected by introducing the knife within the cavity of the womb, and separating by it the attachments of the morbid growth to the inner surface of the organ, or when it was imbedded in its walls, freely incising, from within, the uterine parietes, and turning out with the finger the tumour from its bed; or, if this could not be effected, trusting its expulsion to the contraction of the uterine fibres of the uterus, under the specific influence of ergot.

The result of eight of the cases reported in the essay is set down as in entire recovery. In one, death took place soon after the operation, from pneumonia; in another, from erysipelas of the abdominal parietes. In this instance an ineffectual attempt had been made to remove the tumour by gastrotomy, and then its removal *per vias naturales* was undertaken; during the progress of which operation the fatal attack of erysipelas combined with peritonitis, occurred. In a third case, the patient perished from anæmia; in a fourth, from disease of the heart; in a fifth, from peritonitis, the tumour proving, in this instance, to be of a malignant nature; while in a sixth case, under treatment at the time the essay was completed, fears were entertained that the uterine disease was also of a malignant form.

How far the fatal result, in any or all of these cases, was directly or indirectly attributable to the operation, it is not our intention here to inquire, though in determining upon its propriety and expediency the inquiry is one of some importance.

We confess that the result of the cases presented by Dr. Atlee, favourable as it unquestionably appears to be at first view, does not, after a careful examination of the history of each case, as given by that gentleman, impress us strongly in favour of the operation described.

There is little doubt that, in cases where we could be quite certain as to the true character, position, and state of the uterine tumour, the operation, as practised by Dr. Atlee, may be successful, and prove the means of securing the comfort, or even prolonging the life of the patient; that is, provided always the state of her general health, and her freedom from other organic diseases are such, also, as to warrant its performance. But, when we consider how uncertain must be our diagnosis in most cases; how many circumstances there are in connection with tumours attached to the inner surface of the uterus, and more especially with those developed within its substance, all of vital importance in deciding upon the propriety, feasibility, and probable success of any operation for their removal, of which circumstances we have no means of forming any positive judgment; it must be evident that the propriety of all such operations, and their ultimate result, so far as the patient is concerned, must always be questions involved in much doubt and uncertainty.

Dr. Atlee admits the impossibility of enucleating tumours imbedded in the substance of the uterus immediately beneath its peritoneal covering, when they have been the seat of inflammation, or undergone degeneration; "as, in the first case, adhesions will be formed between it and the cyst, and, in the latter case, the cellular structure of the uniting membrane will be destroyed." Now, is not the same thing true in reference to what Dr. Atlee denominates *intra-mural* uterine tumours, or those developed within the substance of the uterus? Have we any certain means of determining when such change in their condition has or has not taken place?

We have no certain guide to lead us to a correct diagnosis, in the case of tumours hidden entirely from our view, as to their simply fibrous and benign, or their malignant character and tendency. A severe and dangerous operation for the removal of a tumour of a decidedly malignant character should not be countenanced. Even if the tumour has merely the tendency to assume a malignant form, as Dr. Atlee presumes may be the case with some of the fibrous tumours of the uterus, we have strong doubts as to the propriety of such an operation for its removal, however early in the disease it may be performed, and even though we could be certain that by it every portion of the diseased structure may be removed. The history of malignant growths presents the melancholy fact that a return of the disease after an operation, sooner or later, almost invariably takes place; and there are too many reasons for believing that the operation itself has a tendency to accelerate the rapidity of the malignant degeneration, in the tissues surrounding that in which it had already made its appearance.

Dr. Atlee, himself, who we have a right to believe has attentively and cautiously studied the subject of fibrous tumours of the uterus, and who from frequently operating in such cases must have acquired very considerable tact in their diagnosis, admits that he has himself been misled as to their character and the certain success of an operation instituted for their removal.

In the fourth case detailed in the essay before us, he states that—

> "Apart from its history, I should have considered the tumour to be either in the cavity of the uterus, or in its walls; but viewing it in that connection, and respecting the opinions of those gentlemen who had examined the case before, I was willing to believe it to be extra-uterine, consisting of either the right ovary, which had undergone fibrous degeneration, or a pedunculated fibrous tumour of the uterus itself, and that its extirpation by gastrotomy was possible."

The operation was accordingly performed; but upon exposing the uterus, it was ascertained that the removal of the tumour could not, with propriety, be attempted. The wound was accordingly closed, and the patient rapidly recovered. Subsequently, it was concluded, "that the tumour existed within the cavity of the uterus, attached extensively to its interior surface, and that it was possible to remove it through the natural passage." This attempt was, however, equally unsuccessful. The patient died of erysipelas, with peritonitis.

The *post-mortem* examination "disclosed a fibrous tumour in the interior of the uterus, sealed firmly to it at every point, except a space about three-quarters of an inch in diameter, communicating with the mouth of the womb." "The tumour itself had evidently degenerated. Large masses of it had softened down into a brain-like substance, while other parts retained the fibrous character."

Now here is a case of uterine disease entirely beyond the reach of art—in which the diagnosis was marked by so much uncertainty that the abdomen was first opened, and when it was found that the tumour could not be removed by operating from the external surface of the uterus, the edges of the os tincæ were "slightly nicked in several directions," and large quantities of ergot given, in hopes that the uterus would throw off a mass which it was discovered, after the death of the patient, could not have been got rid of by any means short of ablation of the entire organ.

In the fourteenth case, again, the diagnosis is stated to have been quite obscure. So far as it could be made out, the tumour appeared to be fibrous—most probably, extra-uterine. Gastrotomy was performed, when it was found that the tumour could not be removed. After the patient's recovery from this operation, an effort was made to destroy the tumour by cutting through the posterior walls of the vagina and into the substance of the morbid growth. A process of decomposition was in this manner induced, and, after several weeks, the tumour softened and diminished very much in size, and the general health of the patient improved. Some weeks subsequently, "the discharge having ceased, and all operative measures having been carried as far as it was deemed safe, she went to the country for the summer. On her return in the autumn, the abdomen was found to be "still large," but, in all other respects, we are informed, the patient enjoyed good health.

We adduce these two cases not for the purpose of discussing the propriety of the surgical measures instituted in either—but to show how difficult it occasionally is, in cases of uterine tumours, to arrive at so clear a diagnosis as shall indicate the kind of operation adapted to their removal, the propriety of resorting to it, and the probability of its success.

In the hands of the skilful and experienced surgeon—prepared for every emergency, and prompt to overcome every unforeseen difficulty that may present itself—the operation, described by Dr. Atlee in the present essay, may, perhaps, prove successful in a certain limited class of cases of uterine tumours; but, in the hands of the rash and inexperienced, of the mere operator, we very much fear that they will more often result in disaster than in benefit to the unfortunate patient.

The subject of the second of the prize essays is "The Cell; its Physiology, Pathology, and Philosophy, as deduced from Original Investigations" by its author, Dr. Waldo J. Burnett, of Boston, Mass.

We can do little else than give the title of this essay. The subjects embraced in it present so extensive a field of inquiry, and involve so many points of a debatable character, in relation to which a difference of opinion must continue to exist until they shall become definitely settled by repeated as well as more extended and diversified series of observations, that, were we to enter into an examination of the views advanced by Dr. Burnett, we should be obliged to extend the present review, already too long, beyond all reasonable limits.

The essay will be found a very valuable contribution towards the elucidation of the physiology of cell-formation and its relation to organization, mainly deduced from original investigations.

As an original production, its value will depend mainly upon the accuracy of the observations instituted by its author. On this, we are not prepared to offer any opinion. No one is competent to decide upon the fidelity with which Dr. Burnett has delineated the several forms and mutations of organic cells, who has not, with microscope in hand, carefully studied the subject for himself, or who has not, at least, repeated the same series of observations as those from which the deductions of that gentleman are derived.

As a monograph on the general subject of cell development and function, the essay is, to a certain extent, instructive. Deficient, it is true, in regard to some of the more recent facts and doctrines, but, upon the whole, ably and faithfully drawn up. Written, as the author admits, in a prefatory note, during the year 1851, "the many advances the science of structure has since made, has thrown so much light on some obscure points, that the parts relating to them ought almost to be now rewritten, to be up with the times." This deficiency he has, however, sought, at least in part, to make good, by inserting as much new matter as well could be, while the sheets were passing through the press.

We have many reasons to regret that the author was under the necessity of making the statement just alluded to, candid and honourable as it is on his part.

It will deter many, we fear, from the attentive study of the essay, under the impression that they will not derive from it complete information in relation to the subject of which it treats; while it may, perhaps, lead to the supposition that the Association has been misled in conferring one of its annual prizes on a dissertation which is behind the knowledge of the day.

D. F. C.

ART. IX.—*Practical Observations on Aural Surgery, and the Nature and Treatment of Diseases of the Ear.* With Illustrations. By WILLIAM R. WILDE, Surgeon to St. Mark's Ophthalmic Hospital, Dublin, &c. &c. Philadelphia: Blanchard & Lea, 1853. 8vo. pp. 475.

WE have rarely had the pleasure of inviting the attention of our readers to a publication which will be more welcome to the profession than this. It treats of a subject extremely little known to the mass of practitioners, and which has been tacitly relinquished by them to quackery and ignorance as a choice preserve in which these may hunt their game. The reason of this is doubtless to be found in the complex anatomical structure of the ear, and the concealed situation of its most important parts; whereby a thorough physical examination of the organ during life, and a satisfactory *post-mortem* investigation are rendered extremely difficult to all, saving to the few whose nice observation and patient and laborious research are neither to be baffled by obscurities nor wearied by obstacles.

Mr. Wilde possesses in an eminent degree the qualities necessary to the